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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,980	12/01/2003	Radoslav Danilak	NVID-P000817	4928

7590 09/27/2005

WAGNER, MURABITO & HAO LLP
Third Floor
Two North Market Street
San Jose, CA 95113

EXAMINER	
LEE, CHUN KUAN	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/725,980	DANILAK, RADOSLAV	
	Examiner	Art Unit	
	Chun-Kuan (Mike) Lee	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RD

DETAILED ACTION

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al. (US Patent 6,842,803) further in view of Chisholm et al. (US Patent 5,968,143).

2. As per claims 1 and 14, Schmidt teaches a computer system method (Figure 2), comprising of:

a processor (reference number 105, Figure 2);

a system memory coupled to the processor (reference number 115, Figure 2);

a (north) bridge component coupled to the processor (reference number 110, Figure 2);

a storage device (reference number 195, Figure 2) coupled to the (south) bridge component (reference number 130, Figure 2); and

preparing data (disk) transaction information by packaging a plurality of data structures comprising the data (disk) transaction (reference numbers 70, 80, Figure 1).

Schmidt fails to teach specifically a disk controller coupled to the bridge component for controlling said storage device, wherein said disk controller included a plurality of bypass registers;

transferring a command from the processor to the disk controller, the command causing a start up of a disk drive coupled to the disk controller;

transferring the disk transaction information to the bypass register of the disk controller; and

implementing a disk I/O, wherein the disk controller processes the disk transaction information to control the disk drive.

Chisholm teaches a computer system method comprising of:

a (disk) controller coupled to the bridge component for controlling the storage device (disk drive) (reference numbers 111, 113, 114, Figure 1), wherein said (disk) controller included a plurality of (bypass) registers (reference number 203, Figure 3);

transferring a command (block) from the processor to the (disk) controller (reference number 304, Figure 3), the command obviously will cause a start up of the storage device (a disk drive) coupled to the (disk) controller;

transferring the command block (disk transaction information) to the (bypass) register of the (disk) controller (reference numbers 203, 304, 307, 309, Figure 3); and

obviously implement a (disk) I/O, wherein the (disk) controller processes the command block (disk transaction information) to control the storage (disk) drive.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to respectively implement the transfer of command block to and the control of Chisholm's controller and storage device into Schmidt's computer system method. Doing so add and further expand Schmidt's computer system method by reducing the overhead and therefore the latency associated with the transferring of command blocks from the processor to the controller (Chisholm, column 2, lines 19-51 and column 9, lines 53-59).

3. As per claim 2, please see claim 1 in view of Schmidt and Chisholm.

Chisholm further teaches the computer system method comprising of:

preparing the command blocks (disk transaction information) by using the processor of the computer system (column 5, lines 23-27); and

transferring the command block (disk transaction information) from the processor to the (disk) controller (column 5, lines 34-67 and column 6, lines 1-8).

4. As per claim 3, please see claims 1-2 in view of Schmidt and Chisholm.

Chisholm further teaches accessing a bus coupled to the (disk) controller to transfer the control block (disk transaction information) from the processor to the disk controller (reference number 130, Figure 3).

5. As per claim 4, please see claims 1-3 in view of Schmidt and Chisholm.

Chisholm further teaches accessing of the (north and south) bridge component controlling the bus coupled to the storage device (disk controller) (reference number 111, Figure 1); and

transferring the command block (disk transaction information) from the processor to the (disk) controller via the bridge component (Figure 3).

6. As per claim 5, please see claims 1-4 in view of Schmidt and Chisholm. Schmidt further teaches the bridge component is a South bridge of the computer system (reference number 130, Figure 2).

7. As per claims 6-8, please see claim 1 in view of Schmidt and Chisholm.

Chisholm further teaches the computer system method comprising:

wherein the transferring of the command block to the (disk) controller, obviously cause the start up of the storage device (disk drive), is configure to reduce latency for data transfer between the processor and the storage device (column 2, lines 19-51 and column 9, lines 53-59), therefore would obvious reduce a start up latency of the storage device (disk drive);

wherein the command block (disk transaction information) includes a plurality of PRD (physical region descriptor) data structures (reference number 311, Figure 3) and a plurality of command blocks (CPB (command parameter block) data structure) for implementing the disk transaction (reference number 304, Figure 3); and

Schmidt further teaches the computer system method comprising the storage device (disk drive) is compatible with a version of the ATA standard (column 7, lines 1-4).

8. As per claims 9-13, please see claims 1-8 in view of Schmidt and Chisholm.

Schmidt further teaches accessing a North bridge to transfer the data (disk transaction information) (reference number 110, Figure 2); and

transferring the data (disk transaction information) from the processor to the storage device (disk controller) via the North bridge and the South bridge of the computer system (reference number 110, 130, Figure 2).

9. As per claim 15, please see claims 1-14 in view of Schmidt and Chisholm.

10. As per claim 16, it would be obvious to integrate the disk controller into the bridge component in order to reduce cost and size.

11. As per claims 17-20, please see claims 1-14 in view of Schmidt and Chisholm.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671 and email is chun-kuan.lee@uspto.gov. The examiner can normally be reached on 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Popovici Dov can be reached on (571)272-4083. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Mailed responses to this action should be sent to:

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Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

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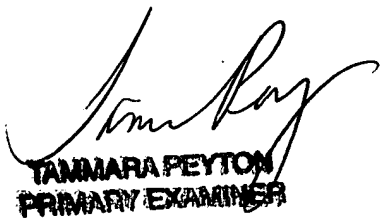

C.K.L.
09/16/2005